

### **ABSTRACT OF THE DISCLOSURE**

Provided is a set top box capable of performing wireless transmission. The set top box includes an advanced television system committee (ATSC) receiver, a transport (TS) stream converting unit, and a wireless processing module. The ATSC receiver converts a tuned digital broadcasting signal into a TS stream. The TS stream converting unit converts a high definition (HD) image signal input from outside into a standard definition (SD) image signal and then converts the SD image signal into the TS stream. The wireless processing module wirelessly processes an output of the ATSC receiver or an output of the TS stream converting unit and transmits the processed output.